3 Min. to Understand EU's CBAM

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What is the EU Carbon Border Adjustment Mechanism (CBAM)?

As the world's second largest commodity market, the EU has announced that it will implement the **Carbon Border Adjustment Mechanism (CBAM) on a trial basis from October 1, 2023, whereby companies importing related products into the EU will be required to declare their carbon emissions. On the other hand, they will also be required to purchase the so-called CBAM certificates from the EU to pay for the carbon emissions of imported products, which will be formally implemented in 2027.**

The Latest Revision of the EU's Carbon Tax Policy

Initially, the CBAM covered only iron & steel, cement, aluminum, fertilizer, electricity, and hydrogen, but after a meeting of EU parliamentary members at the end of 2022, the scope was extended to include steel-related downstream products (i.e., steel screws and bolts will also be covered), with the goal of reducing EU carbon emissions by 55% before 2030 compared to the 1990 level. This will have a major impact on many countries around the world that export a lot of products to the EU and do not yet have a well-developed domestic carbon emissions mechanism or regulation.

Why is There a Carbon Tax?

The concept of carbon rights can be traced back to 2005, when the EU started to impose a carbon fee on carbon emitting companies within the EU, but the same measure was not applied to those outside the EU who imported goods and services into the EU. This is why the CBAM, the world's first carbon border adjustment mechanism, was created, with the goal of discouraging the export of cheaper and more competitive products to Europe from countries that do not yet have complete environmental control policies. The objective of CBAM is to discourage the export of cheaper and more competitive products from countries that do not have complete environmental control policies to Europe to cause damages to the local industry. Although the EU has issued free carbon permits to domestic companies at this stage, the program will be gradually phased out after the implementation of the carbon tariff to meet WTO requirements.

The U.S. will Also Impose a Carbon Tax

Not to be outdone by the EU, the U.S. has also announced plans to impose a carbon tax by 2024, much earlier than the EU's 2027. By then, no matter whether the products are made in the U.S. or imported from abroad, as long as their carbon content is below the required baseline, they will not be subject to the tax; conversely, if they exceed the baseline, a carbon tax of US$55 per ton will be levied. And, the plan extends to downstream products after 2026, once they reach a certain carbon content, they will also be subject to the carbon tax.

Many analysts also believe that in order to obtain a level playing field, China, Japan, South Korea and other countries may also implement their own carbon tax measures in the future.

What are the Standards for Companies to Conduct Carbon Inventory and Carbon Footprint?

The ISO 14064 standard was developed by the International Organization for Standardization (ISO) as the basis for internal carbon inventory and verification methods. The other ISO 14067 is mainly used to measure the carbon footprint of a company, focusing on the total direct and indirect carbon emissions throughout the "life cycle" of the goods and services produced by the company. ISO 14064 focuses on the "carbon inventory" within a company, while ISO 14067 focuses on the "carbon footprint" tracking outside the company.

Possible Impacts on Businesses

China, for example, is one of the world's largest carbon emitters, with a total export value of over 380 billion Euros to the EU in 2020. Some experts believe that once the EU carbon tax is implemented, it will increase the cost of carbon tax for China's steel, aluminum, fertilizer, cement and other industries, and the cost of carbon tax will reach 17%, 20%, 17% and 31% of the export value respectively. According to Goldman Sachs Group's calculations, after the carbon tax is formally implemented, China's exports to the EU are estimated to be subject to an annual carbon border adjustment tax of up to US$35 billion (roughly 7.7% of China's total exports to the EU), which will be a considerable cost burden for many Chinese companies that are mainly focused on export.

Moreover, since many enterprises in Europe and the United States started earlier in carbon emission control, if the carbon tax measures in Europe and the United States are formally in place, other enterprises with particularly high carbon emissions will obviously lose their competitiveness.

What Can Companies Do to Respond to This Trend?

The carbon tax is a current trend in the global industry to pursue a win-win situation for both the environment and corporate sustainable development. Companies that focus on exporting to Europe and the U.S. will be the first to be affected. In view of this, enterprises should not only passively review whether they have the ability to monitor carbon efficiency and implement corresponding calculations and reports. They should also take the initiative to strengthen their manufacturing technology transformation (e.g., the introduction of more energy-efficient equipment and device) and invest more in R&D transformation that emphasizes low carbon emissions (e.g., use of green energy or adoption of low carbon emission materials) in order to gain the most advantageous competitive edge in the upcoming carbon tax challenge.